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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,096	02/23/2004	Mark Forster	134/116	6909

7590  
Averill & Varn  
8244 Painter Ave.  
Whittier, CA 90602

06/30/2005

EXAMINER
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BRITTAIN, JAMES R

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/784,096

Applicant(s)

FORSTER ET AL.

Examiner

James R. Brittain

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 is/are allowed.
- 6) ☒ Claim(s) 5, 7, 8 and 10-20 is/are rejected.
- 7) ☒ Claim(s) 6 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16-20 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 defined a contacting member online 16 fixedly connected to the frame. Lines 19-28 described the motion of the lever arm from a first direction to a second direction and how this motion operates to open the buckle. However, the contacting member which is integral to the release of the buckle through the motion of the lever arm is not mentioned in lines 19-28. It would appear that the description of the motion of the lever arm in the first and second directions is incomplete since it does not described how the lever arm utilizes the contacting member. The remaining claims are indefinite because they depend from an indefinite claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 7, 8 and 10-20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Warrick et al. (US 5857247) in view of Hollins (US 3255502).

Warrick et al. (figures 1-26) teaches release buckle structure comprising a frame 13; a latch 25 movably connected to the frame and adapted for releasably holding a tang in the buckle, the latch having a locked position wherein tang is held, and an unlocked position wherein tang is released; an actuating member 36 movably connected to the frame and mechanically cooperating with the latch, wherein in a first position, the actuating member holds the latch in the locked position, and in a second position the actuating member releases the latch thereby allowing the latch to move to the unlocked position. The difference is that the release buckle structure of Warrick et al. lacks a dual action lever arm to release the buckle when the lever arm is moved in a first direction or a second direction. However, Hollins (figures 2-4) teaches buckle structure including a dual action lever arm 64. The lever arm 64 is pivotally connected to the frame by pivot pin 62. The pin 62 also connects to the actuating part 58 of the actuating lever of the latch 54. Movement of the actuating lever 64 in either a first direction or a second direction causes the bottom surface of the lever arm 64 to contact the frame of the buckle and by doing so lift the pivot pin 62 and thereby also lift the actuating lever portion 58 so as to release the buckle. Hollins identifies this as being an advantage so that the buckle can be released no matter from which direction the lever arm is pulled or pushed. As it would be beneficial to insure that the parachute buckle of Warrick et al. could be released under a stressful condition such as in releasing a parachute harness, it would have been obvious to modify the release buckle of Warrick et al. so that it has a dual action lever arm release as taught by Hollins so as to be more easily released under stress. The teaching of Hollins is such that when utilized with the structure of Warrick et al. motion of the lever arm suggested by Hollins in a first direction would be directly coupled to the actuating member of Warrick et al. through contact of the lever arm with

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the contacting end of the actuating member in an analogous way to the contact with the actuating member 58 of Hollins, whereby the actuating member is movable from the first position to the second position; and motion of the lever arm actuating end in a second direction is inversely coupled to the actuating member through the lever arm pivot end wherein the lever arm contacts and pivots about the contacting member whereby the actuating member is movable from the first position to the second position. In regard to claims 7 and 8, the actuating member 36 of Warrick et al. comprises an actuating lever pivotally coupled to the frame. As to claims 10 and 11, the actuating member and latch of Warrick et al. are respectively biased into the first position and the unlocked position. In regard to claim 12 the actuating end of the lever arm of Hollins includes a finger contacting end adapted for manual manipulation. As to claim 13, Hollins suggests utilizing the lever arm so as to be coupled to the actuating lever by a lever arm pivot pin 62. In regard to claim 14, Warrick et al. suggests the latch of the movably connected to the frame and adapted for releasably holding a tang of a parachute harness securement strap in the buckle. As to claim 15, the amount of released force to move the lever arm is a matter of experiment so as to be usable under the conditions of releasing a parachute harness. Similarly, in regard to claim 16, Warrick et al. (figures 1-26) teaches release buckle structure comprising a frame 13; a latch 25 movably connected to the frame and adapted for releasably holding a tang in the buckle, the latch having a locked position wherein tang is held, and an unlocked position wherein tang is released; an actuating member 36 movably connected to the frame and mechanically cooperating with the latch, wherein in a first position, the actuating member holds the latch in the locked position, and in a second position the actuating member releases the latch thereby allowing the latch to move to the unlocked position. The difference is that the release buckle structure of

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Warrick et al. lacks a dual action lever arm to release the buckle when the lever arm is moved in a first direction or a second direction. However, Hollins (figures 2-4) teaches buckle structure including a dual action lever arm 64. The lever arm 64 is pivotally connected to the frame by pivot pin 62. The pin 62 also connects to the actuating part 58 of the actuating lever of the latch 54. Movement of the actuating lever 64 in either a first direction for a second direction causes the bottom surface of the lever arm 64 to contact the frame of the buckle and by doing so lift the pivot pin 62 and thereby also lift the actuating lever portion 58 so as to release the buckle.

Hollins identifies this as being an advantage so that the buckle can be released no matter from which direction the lever arm is pulled or pushed. As it would be beneficial to insure that the parachute buckle of Warrick et al. could be released under a stressful condition such as when it is needed to release a parachute harness, it would have been obvious to modify the release buckle of Warrick et al. so that it has a dual action lever arm release as taught by Hollins so as to be more easily released under stress. The teaching of Hollins is such that when utilized with the structure of Warrick et al. motion of the lever arm suggested by Hollins in a first direction would be directly coupled to the actuating member of Warrick et al. through contact of the lever arm with the contacting end of the actuating member in an analogous way to the contact with the actuating member 58 of Hollins, whereby the actuating member is movable from the first position to the second position; and motion of the lever arm actuating end in a second direction is inversely coupled to the actuating member through the lever arm pivot end wherein the lever arm contacts and pivots about the contacting member whereby the actuating member is movable from the first position to the second position. In regard to claim 17, the amount of force needed to actuate the lever arm being between approximately 2 pounds and approximately 15

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pounds would have been obvious as a matter of experiment in order to provide the appropriate balance between too much force and too little force when it is needed to release the parachute harness. As to claim 18 the actuating lever is biased into the first position as taught by Warrick et al. As to claim 19, Hollins suggests that the lever arm include a finger contacting end adapted for manual manipulation. In regard to claim 20, Warrick et al. suggests biasing the latch into the online position.

***Allowable Subject Matter***

Claims 6 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-4 are allowed.

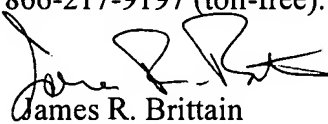
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Brittain whose telephone number is (571) 272-7065. The examiner can normally be reached on M-F 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James R. Brittain  
Primary Examiner  
Art Unit 3677

JRB